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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,621	12/06/2005	Steven Thomas Slunick	60158-315	2760

26/096 7590 04/01/2009
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EXAMINER

KEE, FANNIE C

ART UNIT

PAPER NUMBER

3679

MAIL DATE

DELIVERY MODE

04/01/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/559,621

Applicant(s)

SLUNICK ET AL.

Examiner

Fannie Kee

Art Unit

3679

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 13-18 and 20-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 13-18, and 20-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/29/09 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 25 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 25 recites “wherein the fluid port and the tube are coaxial along a longitudinal axis defined by the fluid port, and the at least one locating feature prevents relative rotation between the fluid port of the housing and the tube about the longitudinal axis defined by the fluid port”. It is not clear where this is described in the specification or shown in the drawings. The specification speaks to the material of the retainer entering a locating feature on the port and the

metal tube to prevent rotation of the metal tube relative to the manifold (page 1, lines 29-31) and also that the retainer rotationally locks the metal tube to the port of the manifold and prevents relative rotation between the metal tube and the port (page 4, lines 5-7). Figures 1 and 2 of the drawing do not show that the retainer prevents relative rotation between the fluid port of the housing and the tube about a longitudinal axis defined by the fluid port, rather, Figure 1 shows the fluid port and the tube with the retainer holding them together and Figure 2 shows the locating features on the fluid port and the tube. Thus, neither the specification nor the drawings show what is being claimed in Claim 25.

Therefore, claim 25 contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 20, 21, and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20 recites “wherein said at least one locating feature includes a first locating feature and a second locating feature, and said fluid port includes said first locating feature and said tube includes said second locating feature”. Claim 1 from which claim 20 depends recites “at least one locating feature having a notch”. Therefore, how can the at least one locating

feature which has a notch now include two separate locating features when the at least one locating feature has been recited as a notch? How can the notch become more than one locating feature? It appears that Applicant is trying to say that *the assembly* includes a first and a second locating feature, one of which is located on the fluid port and the other which is located on the tube. Is this understanding correct? Examiner is interpreting that Applicant means that the assembly includes first and second locating features located respectively on the fluid port and the tube.

Also, it is not clear if Applicant is trying to claim that the second locating feature is a notch or not. As Applicant has not defined that the second locating feature is a notch, Examiner is interpreting that the second locating feature just needs to be located on the tube.

Claim 25 recites “wherein the fluid port and the tube are coaxial along a longitudinal axis defined by the fluid port, and the at least one locating feature prevents relative rotation between the fluid port of the housing and the tube about the longitudinal axis defined by the fluid port”. What does Applicant mean “the at least one locating feature prevents relative rotation between the fluid port of the housing and the tube about the longitudinal axis defined by the fluid port”? What plane is the locating preventing relative rotation in, i.e., is the relative rotation being prevented in the x, y, or z plane? Examiner is interpreting that as long as the retainer prevents relative rotation along a plane which moves about a longitudinal axis of the fluid port, then this claim limitation has been met.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

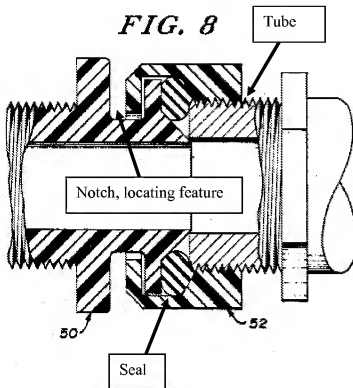
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3, 5, 9, 20, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Bawa U.S. Patent No. 3,747,960.

With regard to claim 1, and as seen in Figure 8 below, Bawa discloses a fluid connection assembly comprising:

- a housing (50) including a fluid port, and the housing is made of a first material;
- a tube made of a second material dissimilar to the first material;
- a seal located between the tube and the fluid port;
- a retainer (52) to secure the fluid port to the tube; and
- at least one locating feature having a notch, wherein the notch receives a portion of the retainer to prevent relative rotation between the fluid port of the housing and the tube.



With regard to claim 2, and as seen in Figure 8 above, Bawa discloses the first material being plastic and the second material being metal.

With regard to claim 3, and as seen in Figure 8 above, Bawa discloses the housing (50) being a manifold.

With regard to claim 5, and as seen in Figure 8 above, Bawa discloses the retainer (52) being plastic.

With regard to claim 9, and as seen in Figure 8 above, Bawa discloses at least one of the fluid port and the tube including the at least one locating feature, and the material of the retainer is received in the at least one locating feature to prevent relative rotation between the fluid port of the housing and the tube.

With regard to claim 20, and as seen in Figure 8 above, Bawa discloses said at least one locating feature including a first locating feature and a second locating feature (threads on tube), and said fluid port including said first locating feature and said tube including said second locating feature.

With regard to claim 25, and as seen in Figure 8 above, Bawa discloses the fluid port and the tube being coaxial along a longitudinal axis defined by the fluid port, and the at least one locating feature preventing relative rotation between the fluid port of the housing and the tube about the longitudinal axis defined by the fluid port.

8. Claims 1, 8, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Williams U.S. Patent No. 3,533,649.

With regard to claim 1, Williams discloses a fluid connection assembly comprising:
a housing (18, 46) including a fluid port (18), and the housing is made of a first material;
a tube (12) made of a second material dissimilar to the first material;
a seal (42) located between the tube and the fluid port;

a retainer (14) to secure the fluid port to the tube; and
at least one locating feature having a notch (area at 32), wherein the notch receives a portion of the retainer to prevent relative rotation between the fluid port of the housing and the tube.

With regard to claim 8, Williams discloses the fluid port (18, 46) including at least one annular recess (40) that receives the seal (42).

With regard to claim 20, Williams discloses said at least one locating feature including a first locating feature (area at 32) and a second locating feature (threads on tube 12), and said fluid port including said first locating feature and said tube including said second locating feature.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 4 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bawa.

With regard to claim 4, Bawa discloses that the tube is metal but does not expressly disclose that metal is aluminum.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have fabricated the tube from aluminum because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

With regard to claim 22, Bawa discloses the claimed invention but does not expressly disclose that said fluid connection assembly is part of a water heater system.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the fluid connection assembly be a part of a water heater system because a recitation with respect to the manner in which an apparatus is intended to be employed does not impose any structural limitation upon the claimed apparatus which differentiates it from a prior art reference disclosing the structural limitations of the claim. In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974); In re Yanush, 477 F.2d 958, 177 USPQ 705 (CCPA 1973); In re Finsterwalder, 436 F.2d 1028, 168 USPQ 530 (CCPA 1971); In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); In re Otto, 312 F.2d 937, 136 USPQ 458 (CCPA 1963); Ex parte Masham, 2 USPQ2d 1647 (BdPatApp & Inter 1987).

With regard to claim 23, Bawa discloses the claimed invention but does not expressly disclose that said fluid connection assembly is part of an air conditioning system.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the fluid connection assembly be a part of an air conditioning system because a recitation with respect to the manner in which an apparatus is intended to be employed does not impose any structural limitation upon the claimed apparatus which differentiates it from a prior art reference disclosing the structural limitations of the claim. In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974); In re Yanush, 477 F.2d 958, 177 USPQ 705 (CCPA 1973); In re Finsterwalder, 436 F.2d 1028, 168 USPQ 530 (CCPA 1971); In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); In re Otto, 312 F.2d 937, 136 USPQ 458 (CCPA 1963); Ex parte Masham, 2 USPQ2d 1647 (BdPatApp & Inter 1987).

With regard to claim 24, Bawa discloses the claimed invention but does not expressly disclose that said fluid connection assembly is part of a hydraulic system.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the fluid connection assembly be a part of a hydraulic system because a recitation with respect to the manner in which an apparatus is intended to be employed does not impose any structural limitation upon the claimed apparatus which differentiates it from a prior art reference disclosing the structural limitations of the claim. In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974); In re Yanush, 477 F.2d 958, 177 USPQ 705 (CCPA 1973); In re Finsterwalder, 436 F.2d 1028, 168 USPQ 530 (CCPA 1971); In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); In re Otto, 312 F.2d 937, 136 USPQ 458 (CCPA 1963); Ex parte Masham, 2 USPQ2d 1647 (BdPatApp & Inter 1987).

11. Claims 1, 6, 7, 9, 13-18, 20, 21, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paoli et al U.S. Patent No. 3,971,614.

With regard to claim 1, and as seen in Figure 1, Paoli et al disclose a fluid connection assembly comprising:

- a housing (12) including a fluid port;
- a tube (14);
- a seal (28) located between the tube and the fluid port;
- a retainer (16) to secure the fluid port to the tube; and
- at least one locating feature having a notch (notch at 18), wherein the notch receives a portion of the retainer to prevent relative rotation between the fluid port of the housing and the tube.

Paoli et al do not disclose that the housing is made of a first material and the tube is made of a second material dissimilar to the first material.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have fabricated the housing from a first material and the tube from a second material dissimilar to the first material because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

With regard to claim 6, and as seen in Figure 1, Paoli et al disclose the fluid port (12) being inserted into the tube (14), and the fluid port including an annular collar (20) and the tube including a flared end (24) that abuts the annular collar.

With regard to claim 7, and as seen in Figure 1, Paoli et al disclose the retainer (16) being molded over the annular collar of the fluid port and the flared end of the tube.

With regard to claim 9, and as seen in Figure 1, Paoli et al disclose at least one of the fluid port and the tube including the at least one locating feature (notch at 18), and the material of the retainer being received in the at least one locating feature to prevent relative rotation between the fluid port of the housing and the tube.

With regard to claim 13, and as seen in Figure 1, Paoli et al disclose a fluid connection assembly comprising:

- a manifold (12) including a fluid port, and the fluid port includes an annular collar (20) and an annular recess (between 20 and 22);

- a metal tube (14) including a flared end (24), and the flared end abuts the annular collar of the fluid port; and

- a retainer (16) molded over the annular collar and the flared end to secure the fluid port to the metal tube.

Paoli et al do not disclose that the manifold and retainer are made of plastic or that a seal is located in the annular recess in the manifold. It is well known in the art to add a seal within a

recess to provide additional protection against leakage (see seal 28 in annular recess of tube 14 of Paoli et al).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the manifold and retainer from plastic because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice (In re Leshin, 125 USPQ 416) and to have added a seal within the annular recess of the manifold because it is well known in the art to add a seal within a recess to provide additional protection against leakage.

With regard to claim 14, and as seen in Figure 1, Paoli et al disclose at least one of the fluid port and the metal tube including a locating feature (notch at 18), and the material of the retainer being received in the locating feature to prevent relative rotation between the fluid port of the manifold and the tube.

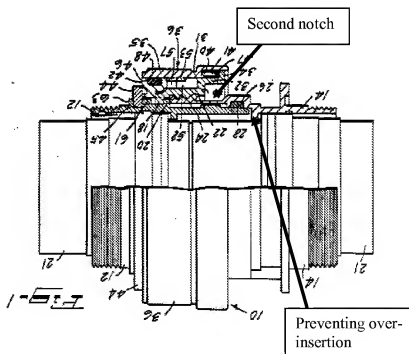
With regard to claim 15, and as seen in Figure 1 below, Paoli et al disclose a method of assembling a fluid connection comprising the step of:

- attaching a fluid port of a housing (12) to a metal tube (14);
- locating a seal (28) between the metal tube and the fluid port;
- forming a first notch (notch at 18) in the fluid port and a second notch in the metal tube;
- retaining (16) the fluid port to the metal tube; and

preventing rotation between the fluid port of the housing and the metal tube by flowing a material into the first notch and the second notch during the step of retaining the fluid port to the metal tube.

Paoli et al do not disclose that the housing is made of plastic.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the housing from plastic because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.



With regard to claim 16, and as seen in Figure 1 above, Paoli et al disclose the step of inserting the fluid port (12) into the metal tube (14).

With regard to claim 17, and as seen in Figure 1 above, Paoli et al disclose the step of preventing over insertion of the metal tube during the step of inserting the fluid port into the metal tube.

With regard to claim 18, and as seen in Figure 1 above, Paoli et al disclose the step of retaining includes molding a retainer (16) over a joint of the metal tube and the fluid housing.

Paoli et al do not disclose that the retainer is made of plastic.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the retainer from plastic because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

With regard to claim 20, and as seen in Figure 1 above, Paoli et al disclose said at least one locating feature including a first locating feature and a second locating feature, and said fluid port including said first locating feature (notch at 18) and said tube including said second locating feature.

With regard to claim 21, and as seen in Figure 1 above, Paoli et al disclose an annular collar (20) of said fluid port including said first locating feature (notch at 18), and a flared end (24) of said tube including said second locating feature.

With regard to claim 25, and as seen in Figure 1 above, Paoli et al disclose the fluid port (12) and the tube (14) being coaxial along a longitudinal axis defined by the fluid port, and the at least one locating feature (notch at 18) preventing relative rotation between the fluid port of the housing and the tube about the longitudinal axis defined by the fluid port.

With regard to claim 26, and as seen in Figure 1 above, Paoli et al disclose a first notch (notch at 18) formed in the fluid port and a second notch formed in the metal tube, and the material of the retainer being received in the first notch and the second notch to prevent relative rotation between the fluid port of the manifold and the tube.

Response to Arguments

12. Applicant's arguments with respect to claims 1-9, 13-18, and 20-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. Bernhardt, Sherman, Gentry et al, Goss, Corsette, Morrill, Boulton, Funk et al, Hartsock et al, and Anderson et al are being cited to show examples of fluid connection assemblies with a tube and a fluid port.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fannie Kee whose telephone number is (571) 272-1820. The examiner can normally be reached on 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aaron M Dunwoody/
Primary Examiner, Art Unit 3679

/F. K./
Examiner, Art Unit 3679
March 20, 2009